UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/800,473	03/15/2004	Robert L. Rae	18279-14446	1521

758 7590 03/24/2010
FENWICK & WEST LLP
SILICON VALLEY CENTER
801 CALIFORNIA STREET
MOUNTAIN VIEW, CA 94041

EXAMINER	
LIU, BEN H	

ART UNIT	PAPER NUMBER
2464	

MAIL DATE	DELIVERY MODE
03/24/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/800,473	RAE ET AL.	
	Examiner	Art Unit	
	BEN H. LIU	2464	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 February 2010*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14,16,19,21,22,24,30-32,34,36 and 38-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14,16,19,21,22,24,30-32,34,36 and 38-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12 February, 2010*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. This is in response to an amendment/response filed on February 12th, 2010.

2. Claims 1, 21, 34, and 42 have been amended.

3. No claims have been presently cancelled.

4. No claims been added.

5. Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-43 are currently pending.

Information Disclosure Statement

6. The information disclosure statement (IDS) submitted on February 12th, 2010 has been considered by the examiner.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

9. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

10. Claims 1-14, 16, 19, 21, 22, 24, 30-32, 34, 36, 38-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fuller et al. (U.S. Patent 7,203,186) in view of Gainsboro (U.S. Patent 5,655,013).

For claim 1, Fuller et al. disclose a call processing system for processing calls associated with a facility, comprising:

a first processor-based system coupled to a plurality of telephone terminals disposed within the facility, the first processor-based system disposed at the facility *(see column 5 lines 4-*

56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 coupled to a plurality of telephone terminals 18 in facility 16),

the first processor-based system transmitting first voice signals associated with one or more of the plurality of telephone terminals *(see column 5 lines 4-21 and figure 1, which recite processor-based system 17, 22, 24 that transmits voice signals associated with IP telephones 18 via Ethernet digital data link 20)*; and

a second processor-based system communicating with the first processor-based system via a digital data link and disposed remotely from the first processor-based system, the second processor-based system establishing calls to called parties requested by the one or more of the plurality of telephone terminals *(see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 remotely coupled to processor-based system 17, 22, 24 to establish calls to called parties requested by IP telephones 18)*,

the second processor-based system converting the first voice signals for transmission over a carrier network responsive to receiving the first voice signals via the digital data link, the second processor-based system converting second non-VoIP (Voice over Internet Protocol) voice signals from the called parties received via the carrier network to second VoIP voice signals for transmission to the first processor-based system via the digital data link *(see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12)*.

Fuller et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals comprises one ore more prison

facilities and the second processor-based system monitors the second non-VoIP voice signals to detect fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 2, Fuller et al. a call processing system wherein the first voice signals and the second VoIP voice signals are transmitted between the first processor-based system and the second processor-based system via voice over Internet protocol data *(see column 10 lines 24-31)*.

For claim 3, Fuller et al. a call processing system wherein the first processor-based system switches the calls based on control by the second processor-based system *(see column 10 lines 28-31, which recite a voice gateway 44 that controls which protocol is used to switch the call)*.

For claim 4, Fuller et al. a call processing system wherein the second processor-based system performs call routing for the calls *(see column 10 lines 24-31, which recite the voice gateway 44 that routes calls to the destination telephone)*.

For claim 5, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system verifies personal identification number (PIN) of a caller placing a call by one of the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. The TMU further validates a call by verifying the PIN of a caller *(see column 1 lines 48-49 and column 6 lines 8-9)*, determines whether a call is accepted by a called party *(see column 3 lines 39-52)*, and processes billing information associated with the call *(see column 6 lines 9-20)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 6, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system processes billing associated with placing a call using the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. The TMU further validates a call by verifying the PIN of a caller *(see column 1*

lines 48-49 and column 6 lines 8-9), determines whether a call is accepted by a called party *(see column 3 lines 39-52)*, and processes billing information associated with the call *(see column 6 lines 9-20)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 7, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system comprises a call processing platform providing at least one of billing, validation and routing associated with the calls made via the first processor-based system. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column*

3 lines 11-15). Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. The TMU further validates a call by verifying the PIN of a caller *(see column 1 lines 48-49 and column 6 lines 8-9)*, determines whether a call is accepted by a called party *(see column 3 lines 39-52)*, and processes billing information associated with the call *(see column 6 lines 9-20)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 8, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing platform provides at least one of billing, validation and

routing associated with calls made via a third processor-based system disposed at another prison facility. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. The TMU further validates a call by verifying the PIN of a caller *(see column 1 lines 48-49 and column 6 lines 8-9)*, determines whether a call is accepted by a called party *(see column 3 lines 39-52)*, and processes billing information associated with the call *(see column 6 lines 9-20)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught

by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 9, Fuller et al. a call processing system wherein the first processor-based system comprises a voice over Internet protocol gateway coupled between the plurality of telephone terminals and the digital data link *(see column 5 lines 4-56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 for processing H.323 VoIP traffic between a plurality of telephone terminals 18 and digital DSL link 34)*.

For claim 10, Fuller et al. a call processing system wherein the second processor-based system comprises a network edge device coupled to the digital data link *(see figure 1, voice gateway 44 coupled to digital link 34 via DSLAM 40)*.

For claim 11, Fuller et al. a call processing system wherein the network edge device comprises a gateway between the digital data network and the carrier network *(see figure 1, voice gateway 44 coupled between a digital link 34 via DSLAM 40 and carrier network PTSN 12)*.

For claim 12, Fuller et al. a call processing system wherein the carrier network comprises a public switched telephone network *(see figure 1, voice gateway 44 and carrier network PTSN 12)*.

For claim 13, Fuller et al. a call processing system wherein the network edge device comprises a voice over Internet protocol gateway *(see figure 1, which recite a voice gateway 44 that processes H.323 VoIP data)*.

For claim 14, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 16, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor- based system provides performs speech recognition on the calls placed by the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with

the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 19, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system performs call monitoring and call recording on the calls placed by the plurality of telephone terminals. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method

and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 21, Fuller et al. disclose a facility call processing system comprising:

a call processing system communicating with a plurality of processor-based systems via digital data links, each processor-based system associated with a facility, the call processor system located remotely from at least one of the facility, the call processing platform being coupled to a carrier network for establishing calls from a plurality of telephone terminals in the facility *(see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 coupled to carrier network 12 to establish calls to called parties requested by IP telephones 18 at facility 16)*,

the call processing platform receiving first voice signals from the facility via the digital data links and sending the first voice signals over a carrier network to called parties, the call processing platform receiving second non-VoIP (Voice over Internet Protocol) voice signals from the called parties via the carrier network and converting the second non-VoIP voice signals to second VoIP voice signals for transmission over the digital data links to the facility *(see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12)*, and

call processing gateways associated with the facility to process the second VoIP voice signals for transmission to the plurality of telephone terminals, the call processing gateways generating the first voice signals responsive to receiving call signals from the plurality of

telephone terminals *(see column 5 lines 4-56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 coupled to a plurality of telephone terminals 18 in facility 16 to transmit and receive voice signals associated with IP telephones 18).*

Fuller et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals comprises one ore more prison facilities and the call processing platform monitors the second non-VoIP voice signals to detect fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15).* Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1).* The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41).*

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate

telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 22, Fuller et al. disclose a call processing system wherein the digital data links provide voice over Internet protocol data communication between the plurality of prison facilities and the call processing platform *(see column 10 lines 24-31)*.

For claim 24, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the

voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 30, Fuller et al. a call processing system wherein the call processing gateways provide interfacing between at least one analog telephone line interface and the digital data links *(see column 5 lines 57-64)*.

For claim 31, Fuller et al. a call processing system wherein the call processing gateways comprise voice over Internet protocol gateways *(see column 5 lines 4-56 and figure 1, which recite a processor-based system comprising computer 17, modem 22, and Call Forwarding Manager 24 for processing H.323 VoIP traffic between a plurality of telephone terminals 18 and digital DSL link 34)*.

For claim 32, Fuller et al. a call processing system wherein the call processing gateways provide at least one local area network interface for coupling a computer workstation to the call processing platform via the digital data links *(see column 5 lines 41-47)*.

For claim 34, Fuller et al. disclose a method for providing facility call processing, in a centralized call processing system, the method comprising:

Communicating with a plurality of processor-based systems via digital data links, each processor-based system collect call signals for establishing calls from telephone terminals in a

facility, at least one of the processor-based system located remotely from the centralized call processing platform *(see column 10 lines 24-35 and figure 1, which recite a voice gateway 44 coupled to carrier network 12 to establish calls to called parties requested by IP telephones 18 at facility 16)*;

receiving a first voice signals collected by one of the plurality of processor-based systems via the digital data link; converting the first voice signals for transmission over a carrier network; receiving a second non-VoIP (Voice over Internet Protocol) second voice signal from the called party via the carrier network; converting the second non-VoIP voice signal to a second VoIP voice signal for transmission over the digital data link to the one of the plurality processor-based systems *(see column 2 lines 7-15 and column 10 lines 24-35, which recite a voice gateway 44 that converts between VoIP H.323 signals received from IP telephones 18 and non-VoIP signals received from called parties in PTSN carrier network 12)*; and

Fuller et al. disclose all the subject matter of the claimed invention with the exception that the facility coupled to a plurality of telephone terminals comprises one ore more prison facilities and the second non-VoIP voice signals are monitored to detect fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 36, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the fraudulent or unauthorized call activity comprises a three-way call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method

and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 38, Fuller et al. disclose a call processing method wherein the method includes routing the call to the called party *(see column 10 lines 24-31, which recite the voice gateway 44 that routes calls to the destination telephone)*. Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system further comprises validating an the call from the one of a plurality of telephone terminals, determining acceptance of the call by the called party, the call established responsive to the acceptance of the call by the called party; and creating call billing information associated with the call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are

connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity such as three-way calling *(see column 4 lines 34-41)*. The TMU further validates a call by verifying the PIN of a caller *(see column 1 lines 48-49 and column 6 lines 8-9),* determines whether a call is accepted by a called party *(see column 3 lines 39-52)*, and processes billing information associated with the call *(see column 6 lines 9-20)*.

Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 39, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further performs speech

recognition on the call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 40, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further records the call. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to

provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 41, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the second processor-based system discontinues the calls responsive to detecting the fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method

and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 42, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system discontinues the calls responsive to detecting the fraudulent or unauthorized call activity in the calls. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS

phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

For claim 43, Fuller et al. disclose all the subject matter of the claimed invention with the exception wherein the call processing system and method further comprises discontinuing the call responsive to detecting the fraudulent or unauthorized call activity. However, Gainsboro from the same or similar fields of endeavor disclose a method and apparatus for managing telephone activity in a prison facility *(see column 3 lines 11-15)*. Inmate telephone units 1 are connected to outside telephone lines through Trunk Management Unit 2 (TMU) *(see column 4 lines 5-10 and figure 1)*. The TMU monitors fraudulent or unauthorized call activity using speech recognition *(see column 5 lines 17-29)*, call recording *(see column 4 lines 31-32)*, and billing processing *(see column 6 lines 9-20)*. If unauthorized activity is detected, the call may be discontinued *(see column 6 lines 36-40)*. Thus, it would have been obvious to the person of ordinary skill in the art at the time of the invention to use the method and apparatus for managing telephone activity in prison facilities as taught by Gainsboro with the a call processing system as taught by Fuller at al. The method and apparatus for managing telephone activity in prison facilities can be implemented by installing the processor-based system 17, 22, 24 and IP telephones 18 of facility 16 as taught by Fuller et al. in one or more of the prison facility containing inmate telephones as taught by Gainsboro. The TMU 2 that monitors fraudulent or unauthorized call activity as taught by Gainsboro can be coupled with the voice gateway 44 as taught by Fuller et al. Together, the TMU 2 and voice gateway 44 can be connected to one or

more prison facilities to facilitate telephone communications. The voice gateway 44 converts VoIP traffic into analog POTS phone signals that is suitable for monitoring by the TMU. The motivation for using the method and apparatus for managing telephone activity in prison facilities as suggested by Gainsboro with the call processing system as taught by Fuller et al. is to provide improved security and security in telephone communications in prison facilities *(see column 3 lines 11-15)*.

Response to Arguments

11. It is noted with appreciation that the Applicants' has carefully considered the previous Office Action and the cited prior art references. The Applicants' arguments regarding the prior art rejections have been fully considered but are not persuasive.

The Applicants assert:

> None of the cited references disclose the feature of "a second processor-based system communicating with said first processor-based system via a digital data link and disposed remotely from said from first processor-based system," as recited in claim 1, as amended. First, Fuller fails to disclose this feature. In Fuller, ADSL modem 22 in a subscriber premises communicates with DSLAM (DSL Access MUX) 40 via DSL telephone connections 30, 32, 34. Although "DSL" is an acronym for "Digital Subscriber Line," signals passed over the DSL telephone connections are analog signals and not digital signals. See Fuller, col. 6, 11. 17-31. More specifically, DSL carries high-frequency sinusoidal carrier wave which is a form of an analog signal. Hence, ADSL model 22 and DSLAM 40 does not communicate via "a digital data link," as recited in claim 1.

Initially, it is noted that because electrical current cannot transition instantaneously between purely discrete values (0 or 1), sinusoidal waves must be used to represent approximations of digital signals and interpreted as digital signals by the receiver. Such sinusoidal waves that approximate digital signals are generated using

frequency band multiplexing. Additionally, it is noted that the specification of the instant application suggests that the digital data link between the first and second processor-based system may comprise digital connections such as T1, DS3, OC3, OCX, ATM, SONET and DSL *(see Specification of the instant application, page 20 paragraphs 61-62)*. Therefore, in view of the specification, it appears that the digital data link as recited by the claim may be implemented using a DSL connection. Further, it is noted that the other listed technologies for the digital data link utilize sinusoidal waves at the physical layer in the same manner as the DSL connection disclosed by Fuller et al.

Additionally, the Examiner respectfully disagrees with the Applicants' characterization of Fuller et al. The cited section of Fuller et al. discloses:

> As seen on FIG. 1, the subscriber premises 16 utilizes only a DSL telephone connection for all telephony and **Internet communications** performed by the subscriber. As is known in the art, a digital subscriber line telephone connection utilizes frequency band multiplexing; analog POTS telephone data is carried at frequencies below 4.0 kHz and a **digital data modulated** at frequencies between 4.0 kHz and 1.1 MHz. Within the subscriber premises, analog telephone connections may be made to the DSL telephone line utilizing filters or diplexers (POTS splitters). Such equipment is used by CFM 24 to interact only with analog telephone signals on line 32. DSL modem 22 incorporates filtering circuitry to operate only with DSL telephone line 34 in the upper frequency band of 4.0 kHz to 1.1 MHZ, for data communications. *(Emphasis added)*.

As emphasized in the quotation above, Fuller et al. discloses a Digital Subscriber Line that utilizes frequency band multiplexing to carry digital data. Specifically, higher frequency waves (4.0 kHz to 1.1 MHz) are used to represent digital signals for data communications. It is additionally noted from the quotation above that the DSL connection is relied upon to provide Internet communications. If the DSL connection merely provides an analog signal, as characterized by the Applicants, then it would be not

able to provide digital signals required for packet transmission across the Internet as disclosed by Fuller et al. Therefore, using the broadest reasonable interpretation, the DSL connection that provides digital signals for data communications between a user facility and voice gateway as disclosed by Fuller et al. is interpreted as the digital data link that allows a second processor-based system to communicate with a first processor-based system as recited by the claim.

For at least the reasons provided, the Applicants' arguments regarding claim 1 are not persuasive. The Applicants present similar arguments for the remaining independent claims but they are also not persuasive. The applicant further argues that the dependent claims are patentable because they depend on the argued limitations. Since the Applicant's arguments regarding independent claims are not persuasive, the dependent claims have not been found to be allowable.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BEN H. LIU whose telephone number is (571)270-3118. The examiner can normally be reached on 9:00AM to 6:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Ngo can be reached on (571)272-3139. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Ricky Ngo/
Supervisory Patent Examiner, Art Unit 2464

BL